Knowledge, Beliefs and Prostate Cancer Screening

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INTRODUCTION:

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- Disclaimer:

  The views expressed are those of the Authors and do not reflect a position or policy of the Department of Defense or the United States Army"

Background

- Prostate cancer is the second leading cause of death among American men
- African American men have the highest incidence and mortality rates in the world
- Reasons for these disparities are unclear
- Associations found between Age, Race/Ethnicity, Family History and Diet

Background:

- ACS Screening Guidelines

Annual screening at age 50

- DRE: Digital Rectal Examination
- PSA: Prostate Specific Antigen Test

** High Risks Groups (African Americans and men with a family history)

- Begin screening at age 45

Purpose:

-To assess the knowledge, beliefs and prostate cancer screening practices among African American military servicemen age 45 and older

Objective:

-To validate the Edwards Prostate Perception Survey

in a military sample in the Pacific

Military Significance:

- Military is a younger and more ethnically diverse workforce.
- Similar disparities are occurring in the military population.
- A diagnosis of prostate cancer significantly impacts on military readiness.
- Prostate cancer may be more severe in a young population.

Military Significance:

- SEERS Data

  Age 40-49 had the lowest survival rates

- Treating earlier stages = more successful preservation of sexual and urinary function

- Results in more improved quality of life

Theoretical Framework:

- Bandura’s Theory of Self-efficacy

  - Individuals generally avoid tasks and situations believed to exceed their capabilities and perform assuredly those activities they judge themselves as capable of handling

4 Primary Sources:

Past experiences

Verbal persuasion

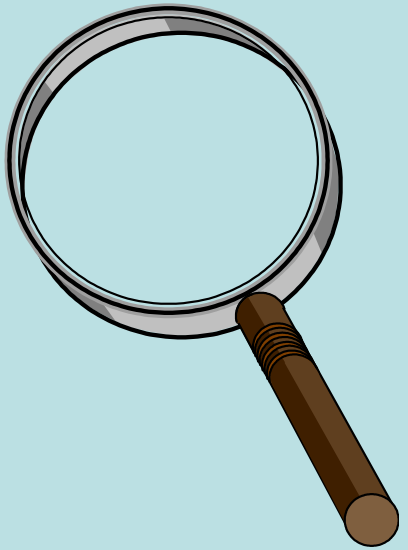
Observation of others

Anxiety level

Research Design:

- Cross sectional study, using an anonymous survey

- Target Population
  - African American military servicemen age 45 and older
  - Reside on Oahu
  - All branches of the military
  - No diagnosis of prostate cancer



Research Instrument:

- Edwards Prostate Perception Survey

Knowledge:	10 Questions (T/F)
Beliefs	16 Questions (Scale)
Self-efficacy	3 Questions (Scale)

- Demographic Section

- Developed for use with a military population

Data Collection Procedures:

- **Data Collected on Weekends**

- **Selected military base exchanges**
  -Pearl Harbor (Navy)
  -Hicham Air Force Base
  -Schofield Barracks (Army)

- **2 Research Teams**

- **Distributed flyers**
  Agreement to participate
  Screened for eligibility
  Administered surveys

Research Questions:

- What are the demographic characteristics of those who agree to complete the Edwards Prostate Perception Survey?
- What are the overall responses to the research instrument?
- How reliable is the instrument as a measure of prostate cancer, knowledge, beliefs and self-efficacy?

Summary of Findings:
(N=101)

- Age

Range: 45 - 82 years

45 – 50 years (n =53)

- Military Status

Active Duty	23
Retired	64
Family Member	9
Unknown	3

Demographics:
(N=101)

Marital Status

Married	74
Divorced	15
Widowed	2
Separated	3
Single	4
Div/remarried	3

- **Education**

< High School	1
HS/GED	15
Some College	20
Associate	21
Bachelor	27
Master	14
Doctorate	3

Demographics:
(N=101)

Care Location

- Army: 43
- Navy 12
- Air Force 7
- Marine 1
- Civ Hospitals 21
- VAMC 2
- Other 14

Perception of Health

- Poor 2
- Average 17
- Good 46
- Excellent 36

Health Status:

Top 7 Medical Problems:

- Hypertension 25
- Diabetes 11
- Cardiac 5
- Orthopedic 5
- Prostate Problems (not cancer) 4
- Arthritis 2
- High Cholesterol 2

Screening History:

Physical Examinations:

Past 1- 2 years: n = 76

Prior Prostate Screening:

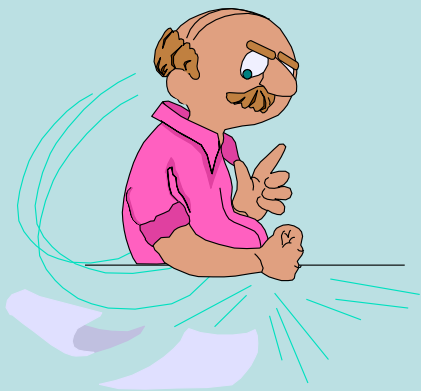
PSA: 53

DRE: 51

- 29% reported that screening had never been recommended

Other Findings:

- 72 % identified HCPs as their primary source of health-related information
- 89% expressed completed confidence in HCPs to advise them on health care
- 81% requested information on prostate cancer
  and screening



Research Question #2

	Range	Mean	SD
Beliefs	38-58	48	4.8
Self-efficacy	2-6	3.7	.64

Knowledge:

Correct responses selected at least 80%

- Screening recommendations (51% & 58%)

Research Question #3

Alpha Reliability Scores

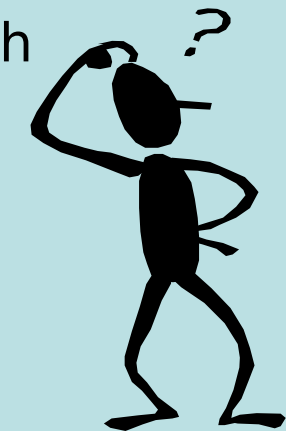
Section	**Initial Score**	**Revised Score**
Knowledge (04)*	.20 (12)	.40
Beliefs	.77 (16)	.81 (13)
Self-efficacy	.62 (03)	.62 (03)

Summary:

- Positive Beliefs
- High levels of Self-efficacy
- Knowledge deficits similar to civilian reports
- Access to care was not a predictor of screening

Inconsistencies ?

- Unlimited access to health care
- Educated, healthy
- Regular physical examination
- 43% had never been screened with the PSA
- 29% reported that screening had never been recommended
- 72% identified care providers-primary source of health related information
- 89% expressed completed confidence in their HCPs



Possible Explanations:

- Testing may have been ordered with other lab tests
- May have been recommended but men did not remember
- Health care providers may not endorse screening
- HCPs may not know what to tell their patients

Recommendations:

- Study validated the need for targeted interventions to educate African American men about prostate cancer
- Primary means of reducing the burden of disease disparities
- Need to better understand perception among health care providers
- Education for all men about the risks and benefits of screening

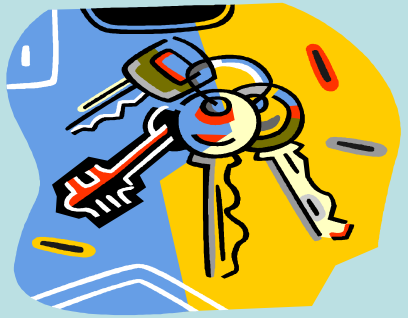
Final Thoughts:

- ✓ 1 in 5 men will develop prostate cancer in his lifetime

- ✓ ACS Projections for 2004

  >220,000 new cases

  28,900 deaths



- ✓ Early detection is the key

  - Only means of early detection is thru the PSA and DRE screening

  - If caught early—survival rates can be as high as 90%

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- Base Exchanges
  -Pearl Harbor Exchange
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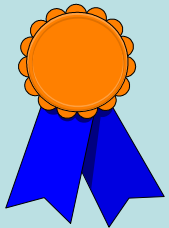

Questions?

Policy Implications:

- The findings in a population of men with equal access to care who were diagnosed with prostate cancer predominantly by PSA screening are indicative of a significant public health problem.

- Although the equal access military setting removes barriers to care, it is possible that screening behaviors among military men may have been different.

- African American men may not have availed themselves to screening or sought evaluations for symptoms in a timely manner as the White patients

- If this is the cause, then public awareness of prostate cancer screening and supporting the ACS guidelines may be beneficial

COL Judd Moul, MC
Director, DOD Center for Prostate Disease Research